Abstract

A method for starting a sensorless, electronically commutatable direct current motor, having a permanent-magnetically excited rotor (24), is proposed, in which the stator (22) carries a stator winding (U, V, W), in particular a three-phase stator winding, whose regulated supply of current from a direct voltage source is already made possible from the standstill state. To that end, by the control device (54) used, at rotor standstill and at the onset of the startup operation in the range below a minimum value of the rotor rpm, first the position of the rotor (24) is ascertained, and then via the switching device (14), a regulated initial supply of current to the phase windings (U, V, W) of the stator (22) is generated, while after the predetermined minimum value of the rotor rpm is attained, the control device (54) receives position signals (JU3) as rotor position signals for a self-commutation of the motor, which signals are derived directly from the third and/or further odd-numbered harmonics of the phase voltages, and from these position signals furnishes control signals to the switching device (14) for supplying current to the phase windings (U, V, W) in normal operation.